

~~DOCKET FILE COPY DUPLICATE~~

DOCKET FILE COPY ORIGINAL

SABIN, BERMANT & GOULD

ATTORNEYS AT LAW

350 MADISON AVENUE

NEW YORK, N. Y. 10017

212 692-4400

RECEIVED

APR 21 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

APR 21 1993

April 20, 1993


OVERNIGHT DELIVERY

Ms. Donna R. Searcy
Office of the Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Re: Notice of Inquiry
ET Docket No. 93-7

Dear Ms. Searcy:

On behalf of Newhouse Broadcasting Corporation, enclosed are



Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

RECEIVED

APR 2 1993

ETD-4111-1

In re:

Implementation of Section 17
of the Cable Television Consumer
Protection and Competition Act
of 1992

ET Docket No. 93-7

RECEIVED

Compatibility Between Cable

TABLE OF CONTENTS

I.	Summary of Comments	1
II.	The FCC Must Not Prevent Cable Operators From Scrambling their Signals to Prevent Theft of Service	2
	A. Scrambling is currently the most practical signal security method	5
	B. Theft of service costs the cable industry significant revenues	8
	C. Scrambling is not inherently in- compatible with advanced television and VCR functions	9
III.	The FCC Should Not Encourage the Sale of Descramblers to Subscribers	11
IV.	The FCC Should Not Adopt National Scrambling Standards	12
V.	Much of Consumer Dissatisfaction is Due to the Way Consumer Electronics Products Are Marketed	13
VI.	Conclusion	14

RECEIVED

APR 21 1993

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In re:

Implementation of Section 17
of the Cable Television Consumer
Protection and Competition Act
of 1992

Compatibility Between Cable
Systems and Consumer Electronics
Equipment

ET Docket No. 93-7

To the Commission:

REPLY COMMENTS OF NEWHOUSE BROADCASTING COMPENSATION

Newhouse Broadcasting Corporation ("Newhouse"), by its attorneys, hereby submits its Reply Comments in connection with Commission's proceeding pursuant to Section 17 of the Cable Television Consumer Protection and Competition Act of 1992 (the "Cable Act") concerning the compatibility between cable systems and consumer electronics equipment.'

I. Summary of Comments

Newhouse welcomes the Commission's attempts to promote compatibility between consumer electronics equipment and cable

Newhouse has strived in its systems to maintain state of the art, consumer friendly and secure systems. Scrambling of signals is the most cost effective method available today to provide programming options and maintain signal security. Proposals to limit scrambling or channel growth would only constrict the cable industry's ability to be innovative and respond to consumers' desire for new services and optional packaging. Congress' desire to limit buy-through restrictions and encourage a la carte offerings would be frustrated by scrambling and channel limitations. Interdiction is not a reliable and cost effective solution.

Much of consumer dissatisfaction is due to improper sales and marketing claims by retailers of consumer electronics products. Unfortunately, given the long useful life of existing television sets and VCRs, there is no perfect solution to the compatibility problem. The Commission should support an inter-industry task force to work on what must necessarily be long range planning, although multiport and other interface devices can be viable solutions.

II. The FCC Must Not Prevent Cable Operators From Scrambling Their Signals to Prevent Theft of Service.

The 1992 Cable Act directs the Commission to promulgate regulations on the use of scrambling security technology. Specifically, the Commission's regulations should:

determine whether and, if so, under what circumstances to permit cable systems to scramble or encrypt signals or to

restrict cable systems in the manner in which they encrypt or scramble signals, except that the Commission shall not limit the use of scrambling or encryption technology where the use of such technology does not interfere with the functions of subscribers' television receivers or video cassette recorders.²

Thus, the Commission must decide "whether" to restrict scrambling at all, and, if so, the Commission is directed not to curtail scrambling if compatibility can be achieved through less draconian measures.

The 1992 Cable Act requires that the Commission engage in a balancing of the benefits and harms that scrambling technology brings to cable subscribers. Of particular concern to Congress were the effects of scrambling on the following television and video cassette recorder ("VCR") functions:

1. viewing a program on one channel while using a VCR to record a program on another channel;
2. using a VCR to record consecutive programs on different channels;
3. using advanced television set features such as picture-in-picture³

² 47 U.S.C. §544A(b) (2) .

³ 47 U.S.C. §544A(c) (1) (A) .

The Commission must also balance the benefit of the use of these features against the cable operator's risk of theft or unauthorized reception if scrambling is not permitted.⁴

Newhouse submits that the Commission should not restrict cable operators' use of scrambling. Scrambling is a practical necessity for cable systems to offer a wide variety of programming and service options. Thus, scrambling security, which permits these choices, is a benefit to the subscriber. Scrambling is also an effective and cost-efficient method of protecting the cable signal. By keeping costs low, both the subscriber and the cable operator benefit. In addition, the considerations which the Commission is required to take into account are virtually identical to the factors which cable operators consider when deciding the configuration of their system that will maximize the attractiveness, security and profitability of their cable services. Therefore, the Commission should not adopt regulations which unnecessarily impede a cable operator's technical and marketing decision-making including use of scrambling technology. The minority of subscribers seeking to enjoy the functionalities identified by Congress in Section 544A(c)(1)(A) can do so through addition of readily available devices without restricting a cable system's use of scrambling.

⁴ 47 U.S.C. §544A(c)(1)(B).

A. Scrambling is currently the most practical signal security method.

Scrambling is the best alternative for protecting valuable programming that most subscribers do not choose to order and/or programming that experiences high subscriber churn. A good example of such programming is pay-per-view ("PPV") since a majority of subscribers never request the same PPV event and the "subscription" typically lasts only a few hours. To provide this programming, it is far more feasible to change the command signal at the headend than to make a service call to each requesting subscriber to change out non-addressable traps. In fact, when PPV is requested on impulse, shortly before the programming is scheduled to begin, changing traps is simply not feasible and addressability is the only method that can meet this demand. The convenience of a last-minute PPV choice is realized because the operator can make a change in access easily with an addressable system, but security requires that all unauthorized subscribers are prevented from access through scrambling. Presently, addressable scrambling requires that each converter box deliver only one signal to the television set tuner at any given time.⁵

⁵ Broadband descrambling theoretically would deliver all authorized channels into the television set, but it is not commercially available as yet and at a minimum will take several years to develop. Further, broadband descrambling would add more

A system that uses traps without addressable technology cannot offer the same programming choices that can be achieved through addressability. Obviously, PPV is severely limited under a trapping security method. It is not feasible to install and remove traps for each subscriber for the revenues to be yielded from a single PPV event. In addition, traps have technical limitations i.e., no more than three or four traps may be placed in a single cable drop without serious risk of signal leakage and signal ingress as well as signal degradation and loss. As more and more channels are added to a system, trapping devices cannot deliver the required security.⁶ In addition, traps are an inefficient use of channels since they interfere with adjacent channels and, in the higher bands, this problem becomes more severe.

Interdiction security is not a reliable solution to the dilemma of improved channel choice, television quality, and signal security. In both interdiction and addressable scrambling, a signal from the headend controls a device near the subscriber's television set. With interdiction, however, an electronic box outside the subscriber's home allows all authorized signals into the home and jams all unauthorized signals. An interdiction system has several serious drawbacks. First, interdiction is a poor

⁶ For example, pay services which are multiplexed may occupy three times as many channels. To offer just one multiplexed pay service, the trapping configuration becomes three times as complex. Obviously, this reduces the ability of the cable operator to offer multiplexing.

method of signal security for two reasons. The signal travels from the home to the interdiction device without scrambling and thus can be illegally tapped and stolen at any point in the cable plant outside the subscriber's property. In addition, if the interdiction device malfunctions it fails to jam unauthorized signals to subscribers; such a malfunction is hard to detect. Since the interdiction box is outside the home, the electronics must be placed in a hostile and unreliable environment which leads to more service calls, equipment replacement, and customer dissatisfaction. Further interdiction devices are installed into the cable plant and so the installation process causes a loss of service to other subscribers during installations. Lastly, interdiction devices must control the access of each protected channel. Because current interdiction technology does not allow for control of more than 30 channels, the programming which can be offered on an interdiction system is limited or a converter must be used to access additional channels.

Finally, it should be noted that in many ways the mandates of the 1992 Cable Act necessitate the use of scrambling. The tier buy-through provision ⁷ and the Commission's rules promulgated on March 10, 1993 require compliance through addressability within ten years for all cable systems, absent an individual waiver by the FCC. As described above, addressability through scrambling is the

⁷ 47 U.S.C. §543(b)(8).

only feasible alternative. In addition, the must-carry provisions allow local broadcasters to elect, every three years, between must-carry rights and retransmission consent. Prospective must-carry stations are also given rights to forced carriage, within technical limitations, on cable channels of their choosing. Thus, the cable operator must design a system that will accommodate channel-positioning rights and changing broadcasting channels. Addressability through scrambling most efficiently minimizes the risks of expensive equipment changes throughout the cable plant that would be required under a trapping security system.

B. Theft of service costs the cable industry significant revenues.

The revenues lost from cable theft are a real concern for cable operators and the Commission's rules must not prevent operators from combatting these losses. According to a recent National cable Television Association survey, the cable industry lost approximately \$4.7 billion in revenues from cable theft in 1991. This figure represents nearly 24% of the total 1991 gross revenues earned by the cable industry. Clearly, cable theft is a serious threat to the continued success of the cable industry and Congress has consistently recognized that cable theft is a problem that requires both civil and criminal sanctions.⁸ The Commission's

⁸ 47 U.S.C. §553; 1992 Cable Act §21. See also, H.R. Rep. No. 934, 98th Cong., 2d Sess. 83 (1984).

1. The first of the two main parts of the report is the description of the situation in the country.

2. The second part of the report is the analysis of the situation in the country.

3. The third part of the report is the conclusion of the report.

4. The fourth part of the report is the recommendation of the report.

5. The fifth part of the report is the annexes of the report.

6. The sixth part of the report is the bibliography of the report.

7. The seventh part of the report is the list of abbreviations of the report.

8. The eighth part of the report is the list of symbols of the report.

9. The ninth part of the report is the list of tables of the report.

10. The tenth part of the report is the list of figures of the report.

11. The eleventh part of the report is the list of references of the report.

12. The twelfth part of the report is the list of footnotes of the report.

13. The thirteenth part of the report is the list of appendices of the report.

14. The fourteenth part of the report is the list of annexes of the report.

15. The fifteenth part of the report is the list of symbols of the report.

16. The sixteenth part of the report is the list of tables of the report.

17. The seventeenth part of the report is the list of figures of the report.

18. The eighteenth part of the report is the list of references of the report.

19. The nineteenth part of the report is the list of footnotes of the report.

20. The twentieth part of the report is the list of appendices of the report.

unscrambled signals to go directly to the television or VCR. Cable

cost of acquiring a second descrambler. Scrambling, and the program options it provides all subscribers, should not be restricted.

III. The FCC Should Not Encourage The Sale of Descramblers To Subscribers.

The 1992 Cable Act suggests that FCC regulations should encourage the sale of converter boxes.¹⁰ While Newhouse believes that the term "converter boxes" does not include converter/descramblers, Newhouse wishes to emphasize that the widespread sale of converter/descramblers would not be in the interests of subscribers or cable operators. To stay ahead of signal piracy, cable operators need to continually readjust their scrambling security mechanisms. The ability to change scrambling methods in response to signal pirating requires that operators retain some control to change out the subscribers' equipment. However, if subscribers are encouraged to purchase converter/descramblers that become obsolete because of the efforts of signal pirates, the law-abiding subscriber suffers the loss.

In addition, subscriber ownership of converter/descramblers increases signal theft problems for two reasons. First, subscribers will be more apt to tamper with equipment which they own, rather than with equipment they know the cable operator owns. Second, it will be more difficult to distinguish between legal and illegal descramblers if subscribers are free to purchase this

¹⁰ 47 U.S.C. §544A(c)(2)(C).

equipment. Both of these problems would raise the cost of enforcement against signal theft and would likely increase the incidence of such theft. The National Cable Television Association estimates that, over its useful life, an illegal descrambler costs the cable industry an estimated \$2,936. In addition, it is estimated that in 1991 approximately 11.2% of homes passed engaged in theft or basic services and approximately 11.5% of homes passed engaged in theft of premium service. FCC regulations should not unwittingly contribute to the proliferation of illegal devices by making their detection more difficult.

IV. The FCC Should Not Adopt National Scrambling Standards.

A national scrambling standard, including a national renewable security standard, is unlikely to be workable, wise nor result in solving today's compatibility problems. Newhouse operates 69 systems. These systems vary in terms of architecture, equipment and security methods because of the age of the plant, and differing local characteristics including spending patterns and topography.

As discussed above, theft of service is rampant in the cable industry. A national standard would only make it easier for cable "pirates" to figure out how to "break" the system and proceed with the distribution of illegal descramblers. Today, individual systems at least have some limited ability to frustrate large scale illegal operations through individualized local scrambling configurations.

National standards would also serve to make obsolete operators' investment in current cable facilities, at a huge loss to cable companies and ultimately, subscribers. National standards are also likely to stifle innovations and development of new security systems.

Finally, national standards are unlikely to solve today's compatibility problem given the useful life of current TVs and VCRs in subscribers homes.

V. Much of Consumer Dissatisfaction Is Due to The Way Consumer Electronics Products Are Marketed.

Newhouse systems have worked for many years to ensure that their systems are state of the art, secure and consumer friendly. New technology and equipment have been evaluated in terms of performance, features, compatibility, security and costs. However, over the years Newhouse has found that television sets and VCRs have been sold without regard to their ability to interact with cable television technology. Retail outlets advertise, market and sell television sets and VCRs billed as cable compatible which are not. In essence, this is like a tire dealer who markets and sells tires for GM cars knowing full well they may not be used without some adjustments to the vehicle, and yet tells its customers to call GM to correct any problems. The FCC regulations should be designed so that this no longer happens.

Unfortunately, it is the cable industry which bears the brunt of consumer dissatisfaction today although, in Newhouse' experience, the cable industry has been rebuffed in its efforts to work with the consumer electronics industry towards an acceptable solution to the compatibility problem.

VI. Conclusion.

Fundamentally, there is no perfect solution today to each of the compatibility problems identified by Congress in the 1992 Cable Act. Additional equipment can solve some of the problems, but many consumers do not want more hardware-but less. The problem has been compounded over the years as each industry has added sophistication to its equipment: cable by adding additional channels and services and the electronics industry by adding more and more enhanced features. The situation is not likely to be resolved for many years in view of our industry's existing technology and the number and life span of consumer receivers. However, viable solutions do exist through multiport technology. The cable and consumer electronics industries should be encouraged, with the Commission's oversight, to explore this and other interface devices which could help to restore full functionality to television receivers and VCRs without imposing economic hardships on consumers or cable operators.

Finally, the Commission must be extremely sensitive to security concerns which, as a practical matter, would be severely

compromised if scrambling of channels is forbidden in advance of development of reliable and cost effective alternatives and if consumers are able to purchase and use decoders brought from outside vendors.

Respectfully submitted,

NEWHOUSE BROADCASTING CORPORATION

By: Arthur J. Steinhauer

Arthur J. Steinhauer
Sabin, Bermant & Gould
350 Madison Avenue
New York, New York 10017
(212) 692-4418

March 20, 1993
14295

CERTIFICATE OF SERVICE

This will certify that an original and nine copies of the foregoing Reply Comments were sent via overnight delivery service on this 20th day of April, 1993, to the following:

Office of the Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Wendy M. Merced
Wendy M. Merced

April 20, 1993